

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/16/2010 has been entered.

2. As directed by the amendment filed 4/16/2010: claims 16, 31 and 32 have been amended. Thus, claims 16-32 are presently pending in this application.

Information Disclosure Statement

3. The information disclosure statement filed on 4/16/2010 does not fully comply with the requirements of 37 CFR 1.98(b) because: Applicant has failed to provide the publication date for the foreign reference TW 535734; furthermore no copy of the reference was provided which the Examiner may refer to for obtaining this information. Since the submission appears to be *bona fide*, applicant is given **ONE (1) MONTH** from the date of this notice to supply the above mentioned omissions or corrections in the information disclosure statement. NO EXTENSION OF THIS TIME LIMIT MAY BE GRANTED UNDER EITHER 37 CFR 1.136(a) OR (b). Failure to timely comply with this

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notice will result in the above mentioned information disclosure statement being placed in the application file with the noncomplying information **not** being considered. See 37 CFR 1.97(i).

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 16, 31 and 32 are rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicants regard as their invention.

6. Evidence that claims 16, 31 and 32 fail to correspond in scope with that which applicants regard as the invention can be found in the reply filed 4/16/2010. In that paper, Applicant has presented a discussion regarding “elastic means”, “elastic elements” and “elastic members”. As best understood by the Examiner, Applicant has expressed that the improvement in Applicant’s device over the prior art is the presence of only a single “elastic member” which functions to both bias the clamping ring around the chuck as well as provide a cushioning effect, where the prior art [according to Applicant] requires two or more “elastic members” to achieve the same.

7. However, Applicant’s claims do not currently recite such a limitation. The claims currently refer to the “elastic element” being “a single element” and the elastic element being “the single element compressed during the [cushioning] movement”.

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8. After careful consideration, it is the Examiner's position that the limitation of "the elastic element being a single element" does not limit the elastic element to a single member. Rather, an "element" may comprise multiple "members". Furthermore, in light of the inclusive transitional term "comprising" in the claim language, the limitation of "the elastic element being the single element compressed" requires only that the same "single element" previously recited also be compressed during the cushioning movement, and does not preclude an interpretation wherein a second "single element" is likewise compressed.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 16-22, 24 and 26-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kageyama (US Patent 5,022,772) in view of Leistenschneider (US Patent 2,049,965), further in view of Staedtler (DE Patent 8903990). The Examiner notes that all citations to the text of the Staedtler reference are made with respect to the English translation of the document provided with this action.

11. In re Claim 16, Kageyama discloses a mechanical pencil comprising a tubular body 1 ("outer cylinder"; Fig. 9A; Column 9, Lines 65-66) extending along a longitudinal

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axis (See Fig. 9A) between a rear end ("rearward outer cylinder"; Fig. 9A; Column 9, Line 67) and a front end 1a ("forward outer cylinder"; Fig. 9A; Column 9, Line 66) provided with an orifice (Column 14, Lines 40-42). A lead 'S' (Fig. 9A) is capable of emerging (Column 14, Lines 40-42) through the orifice, and a lead-advancing mechanism is arranged in the tubular body. The advancing mechanism comprises: a longitudinally movable member 110 ("cassette adapter"; Fig. 9A; Column 10, Lines 13-15) having a forwardly oriented bearing surface ("forward end"; Fig. 9A; Column 10, Lines 25-28) and a reservoir prolonged by a central duct (See Fig. 9A) allowing the passage of the leads one by one (Column 13, Lines 11-31). There is a chuck 9 (Fig. 9A; Column 10, Line 4) having a tubular portion connected to said movable member, in order to allow the passage of a lead from the central duct toward a head (See Annotated Partial Fig. 9A below) of said chuck, wherein said chuck is capable of being clamped on the lead (See Annotated Partial Fig. 9A below; Claim 1c). A clamping ring 10 ("chuck tightening ring"; Fig. 9A; Column 10, Line 19) is movable longitudinally with respect to said chuck and to the tubular body and is designed to cooperate with the head of said chuck (Column 15, Lines 16-21; Claim 1e). There is an elastic element 11 ("resilient body"; Fig. 9A; Column 10, Line 25) having a front end and a rear end, wherein the rear end bears against the bearing surface of said movable member (Column 10, Lines 25-28; Fig. 9A). The elastic element is designed to be a single element (See Fig. 9A, it being seen that the first resilient body 11 is a single element) which biases said clamping ring against the head of said chuck when said advancing mechanism is in a rest position (Claim 1h). There is a bush 8 ("sleeve"; Fig. 9A;

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Column 10, Line 20), movable longitudinally with respect to said chuck and the body (Column 10, Lines 20-23). The bush is arranged between said clamping ring and the front end of said elastic element (Fig. 9A; Column 10, Lines 20-28), wherein the body has a front stop (See Annotated Partial Fig. 9A below) designed to limit the forward displacement of the bush. The chuck, the clamping ring and the bush move together toward the rear end when a user exerts an excessive pressure on the lead (Column 14, Lines 28-33).

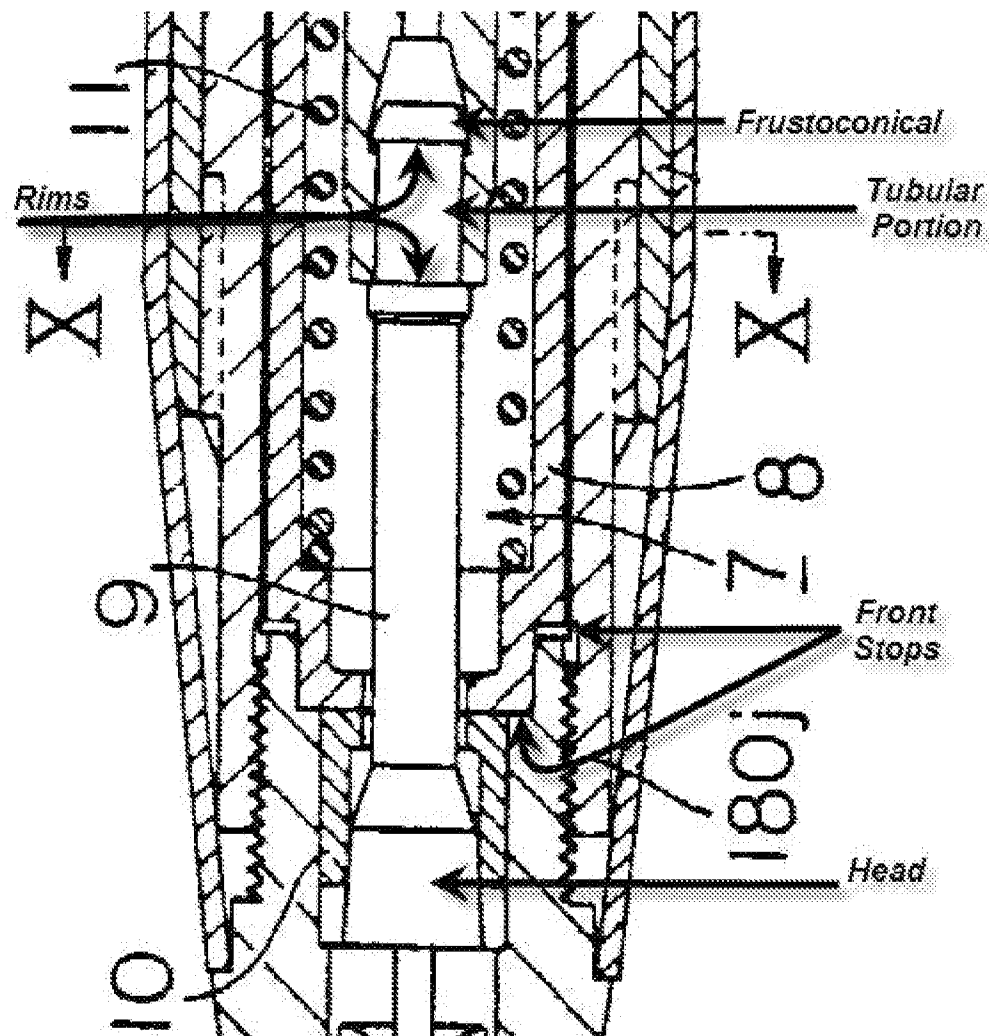
12. Although Kageyama does not disclose the chuck being movable longitudinally with respect to said movable member over a defined stroke, attention is directed to Leistenschneider which teaches a mechanical pencil comprising: a longitudinally moving member 27 ("magazine"; Fig.'s 1-2; Column 4, Lines 18-19 and 1-3) having a forwardly oriented bearing surface (Column 3, Lines 64-68). There is a chuck 0/9 ("clamping sleeve" and "lead tube"; Fig.'s 1-2; Column 3, Lines 46-48) having a tubular portion 32/33 ("annular flanges"; Fig.'s 1-2; Column 4, Line 24) connected to said moveable member (Fig.'s 1-2), wherein said chuck is movable longitudinally with respect to said movable member over a defined stroke (Column 4, Lines 18-46), for the purpose of preventing the likelihood of lead becoming jammed in the mechanism (Column 4, Lines 18-23).

13. Furthermore, although Kageyama does not disclose the elastic element being the single element compressed during the movement for imparting a cushioning effect, attention is directed to Staedtler which teaches an advancing mechanism comprising an elastic element 6 (Fig. 1; See "Page Number 3", Para. 1, Line 1), wherein the elastic

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element is a single element bearing against the bearing surface of a movable member and biasing a clamping ring against the head of a chuck (See Fig. 1; "Page Number 2"; Para. 2). The elastic element is also the single element compressed during the cushioning movement ("Page Number 2"; Para. 2), for the purpose of providing an advancing mechanism of simplified structure for facilitating assembly and maintenance of the mechanism ("Page Number 1", Para. 3 and "Page Number 2", Para. 2).

14. Accordingly, it would have been obvious to a person having ordinary skill in the art, at the time the invention was made, to modify the device of Kageyama, by removing the "opening or closing mechanism 70" (Fig. 9A; Column 13, Lines 11-31) and providing in its place an extended tube portion connected to the "tubular portion" (See Annotated Partial Fig. 9A below), which extends up to the reservoir defined by lead pipe 18 (See Fig.'s 9A-B), such that the chuck is movable longitudinally with respect to said movable member over a defined stroke, as taught by Leistenschneider, and further to construct the first resilient body 11 with sufficient tolerances such that the second resilient body may be removed, thereby providing the device with a single elastic element that functions to both bias the clamping ring and to be compressed for providing a cushioning effect, as taught by Staedtler, for the purpose of providing an advancing mechanism which will prevent the likelihood of lead becoming jammed in the mechanism and which is also of a simplified structure for facilitating assembly and maintenance of the mechanism.



Annotated Partial Fig. 9A

15. In re Claims 17 and 31, Kageyama further discloses the front stop (See Annotated Partial Fig. 9A above) is formed by a radially inner rim which cooperates with a peripheral portion of the front end of the bush 8 (See Fig.'s 9A and 10).

16. In re Claims 18, 30 and 32, Kageyama further discloses said elastic element 11 (Fig. 9A) is a helical compression spring (Column 5, Line 42). Further regarding Claim

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30, although Kageyama does not disclose the elastic element being designed to exert a pressure within the specifically claimed ranges, it is the Examiner's opinion that it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide an elastic element designed to exert pressure within the specific ranges, for the purpose of providing a mechanical pencil with the optimal pressure tolerances for achieving a desired cushioning effect, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

17. In re Claim 19, Leistenschneider further discloses the tubular portion 32/33 (Fig. 2) of the chuck 0/9 (Fig.'s 1-2) has, from a rear end, first and second radially outer rims ("annular flanges"; Fig. 2; Column 4, Line 24). The front end of said movable member has an orifice (See Fig. 2), through which the chuck slides between the first and second rims. The first and second rims being spaced apart longitudinally in order to limit this sliding of said chuck to a value equal to the defined stroke (Column 4, Lines 18-46).

18. In re Claim 20, Kageyama further discloses the tubular portion (See Annotated Fig. 9A above) of said chuck 9 (Fig. 9A) has a frustoconical portion (See Annotated Partial Fig. 9A above) extending from the first rim as far as the rear end of said chuck.

19. In re Claims 21-22, Kageyama further discloses the body 1 (Fig.'s 9A-B) has a rear stop 202d (Fig. 9B) designed to cooperate with a complementary stop ("rear end"; Fig. 9B; Column 11, Line 3) of said movable member 110 (Fig.'s 9A-B) and to limit the rearward displacement of said movable member. The longitudinal distance between the

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front stop of the body and the rear stop being designed so that said clamping ring keeps said chuck clamped under the action of the bush when said advancing mechanism is in the rest position (Column 11, Lines 2-9).

20. Although Kageyama does not disclose the rear stop is formed by a radially inner rim of the body, the rim cooperating with a radially outer shoulder of said movable member, it is the Examiner's opinion that it would have been an obvious matter of design choice to form the rear stop and complimentary stop in the configuration of a radially inner rim and a radially outer shoulder respectively, for the purpose of for the purpose of constructing cooperating stopping surfaces, since such a modification would have involved a mere change in the form or shape of a component. A change in form or shape is generally recognized as being within the level of ordinary skill in the art. *In re Dailey*, 149 USPQ 47 (CCPA 1976).

21. In re Claim 24, Leistenschneider further discloses one elastically deformable compensation member 5 ("spring"; Fig. 1; Column 2, Line 37) arranged between a front stop of the body 21 (See Fig. 1) and a bush 6 ("cylindrical tubular portion"; Fig. 1; Column 2, Lines 30-37; it being understood that the 'cylindrical tubular portion' of the clamping ring is an equivalent structure of a bush).

22. In re Claims 26-28, Leistenschneider further discloses the body 21 (Fig. 1) has a rearward movement stop 7 ("block"; Fig. 1; Column 2, Line 42) designed to limit the rearward displacement of said clamping ring 4 (Fig. 1; Column 2, Lines 30-32) from the rest position of said advancing mechanism to a value at most equal to the defined stroke of a chuck 0/9 (Fig. 1; Column 3, Lines 46-48); wherein the rearward movement

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stop 7 (Fig. 1) is formed by a stud integral with the body (Column 2, Lines 42- 45) extending inward between the bush ("cylindrical tubular portion"; Fig. 1; Column 2, Lines 30-37) and said movable member 27 (Fig. 1), the stud being designed to limit the rearward displacement of the bush 6 ("flange"; Fig. 1; Column 2, Line 40; it being understood that the 'cylindrical tubular portion' of the clamping ring is an equivalent structure of a bush). The rearward movement stop is formed by an inner rim 7 (Fig. 1) of the body 21 (Fig. 1), the rim being designed to cooperate with a radially outer shoulder 8 (Fig. 1; Column 2, Line 33) of said clamping ring 4 (Fig. 1).

23. Although Leistenschneider does not explicitly disclose that the rearward movement stop is formed by a radially inner rim, which extends radially inward, it is the Examiner's opinion that it would have been an obvious matter at the time to construct the rearward movement stop in the form of a radially inner rim, extending radially inward. This is especially true in this instance where Leistenschneider discloses that the mating flange 6 (Fig. 1) is in the form of a radially protruding surface ("cylindrical tubular"; Column 2, Lines 34-37).

24. In re Claim 29, Kageyama further discloses the chuck 9 (Fig. 9A) is capable of driving the lead 'S' (Fig. 9A) forward over a defined stroke from the rest position of said advancing mechanism (Abstract).

25. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kageyama in view of Leistenschneider, in view of Staedtler, further in view of Sharrow (US Patent 2,055,316).

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26. In re Claim 23, as discussed above in regard to Claim 16, the combination of Kageyama/Leistenschneider/Staedtler, discloses all the claimed features, except for the body having an aperture extending longitudinally as far as a rear end, said movable member having a pin projecting into the aperture, and the rear end of the aperture forming the rear stop. However, attention is directed to Sharrow which teaches a mechanical pencil having a body 9 (Fig. 1) with an aperture 15 (Fig. 1) extending longitudinally as far as a rear end, and wherein a movable member 12 ("disc"; Fig. 2; Column 1, Line 46) has a pin 14 ("stud"; Fig. 2; Column 1, Line 47) projecting into the aperture, the rear end of the aperture forming a rear stop, for the purpose of providing gauge whereby a user may observe the spring tension of the mechanical pencil (Column 3, Lines 23-29).

27. Accordingly, it would have been obvious to a person having ordinary skill in the art, at the time the invention was made, to modify the device of Kageyama, such that the body has an aperture extending longitudinally as far as a rear end, and wherein said movable member has a pin projecting into the aperture, the rear end of the aperture forming the rear stop, as taught by Sharrow, for the purpose of providing a gauge whereby a user may observe the spring tension of the mechanical pencil.

28. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kageyama in view of Leistenschneider, in view of Staedtler, as discussed above in regard to Claim 24 above, further in view of Schwartzman (US Patent 3,379,490). The combination of Kageyama/Leistenschneider discloses all the claimed features, except

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for the compensation member comprises at least one tab elastically deformable in a longitudinal direction and produced in one piece with the body. However, attention is directed to Schwartzman which teaches an applicator device comprising an applicator tip 26 ("tapering shoulder"; Fig. 1; Column 2, Line 39) and a compensation member 28 ("helical spring"; Fig. 1; Column 2, Line 43), wherein the compensation member comprises at least one tab ("helical coils"; Column 2, Line 40) elastically deformable in a longitudinal direction and produced in one piece with the body (Column 2, Lines 36-56), for the purpose of simplifying construction of the device and decreasing manufacturing costs (Column 1, Lines 55-57).

29. Accordingly, it would have been obvious to a person having ordinary skill in the art, at the time the invention was made, to modify the device of Kageyama, such that the compensation member comprises at least one tab elastically deformable in a longitudinal direction and produced in one piece with the body by replacing the individual tip 3 and compensation member 11 (Fig. 1) with a single integrated tip and compensation member, as taught by Schwartzman, for the purpose of simplifying construction of the device and decreasing manufacturing costs.

Response to Arguments

30. Applicant's arguments with respect to the claims have been considered but are moot in view of the new grounds of rejection.

Conclusion

31. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Kageyama (US Patent 4,627,756) which discloses a writing instrument with two elastic elements, wherein one is a spring and the other is a longitudinally deformable structure; Kageyama (US Patent 5,826,999) which discloses a writing instrument with two elastic elements, wherein one is a spring and the other is a radially deformable structure; and Maruyama (US Publication 2002/0154934) which discloses a writing pencil having a front portion comprising a longitudinally deformable structure formed in one piece thereon.

32. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan A. Varnum whose telephone number is (571) 270-7853. The examiner can normally be reached on Monday - Friday, 9:00 AM - 5:00 PM EST.

33. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Huson can be reached on (571) 272-4887. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

34. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic

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Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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